

FOR OFFICIAL USE ONLY

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

## SEARCH REQUEST FORM

Examiner # (Mandatory): 74091 Requester's Full Name: Ljiljana (Li) CiricArt Unit 3743 Location (Bldg/Room#): CPK1 11B54 Phone (circle 305 306 308) 3925Serial Number: 09/660,733 Results Format Preferred (circle): PAPER DISK E-MAILTitle of Invention "Method and Apparatus for Temperature Gradient Control in an Electronic System"Inventors (please provide full names): James<sup>S</sup> Wilson, Timothy<sup>C</sup> Fletcher,  
Lucian<sup>A</sup> BRASIER, JAMES<sup>S</sup> MASONEarliest Priority Date: Sep 13, 2000

Keywords (include any known synonyms registry numbers, explanation of initialisms):

- ① turbulence inducing structure (disposed along a fluid passageway)
- ② predetermined temperature profile
- ③ thermally conductive
- ④ protusions
- ⑤ cold plate
- ⑥ aluminum silicon carbide (AlSiC)
- ⑦ tubing
- ⑧ stainless steel
- ⑨ dimples or fins
- ⑩ fluid supply device
- ⑪ electronic components
- ⑫ phased array antenna system
- ⑬ isothermal

## Search Topic:

Please write detailed statement of the search topic, and the concept of the invention. Describe as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).

Invention relates to a thermally conductive flat plate or "cold plate" having a fluid passageway or tubing formed therein, a plurality of turbulence-inducing structures or fins or <sup>or protusions or</sup> dimples formed in the wall or by the wall of the passageway or tubing, a fluid flowing through the passageway or tubing, where the protusions or dimples or fins or other turbulence inducing structures are spaced along the passageway or tubing in such a way as to achieve an isothermal or otherwise predetermined temperature profile in the plate along the passageway or tubing.

Searcher: Julie WalkerSearcher Phone #: 305-8587Searcher Location: CP2-2C08Date Picked Up: 11/13/02Date Completed: 11/14/02

Clerical Prep Time: \_\_\_\_\_

Terminal Time: 54m

Number of Databases: \_\_\_\_\_

Searcher Prep: 150m

1m 11/12

## Type of Search

\_\_\_\_ N.A. Sequence

\_\_\_\_ A.A. Sequence

\_\_\_\_ Structure (#)

☒ Bibliographic

\_\_\_\_ Litigation I

☒ Fulltext

\_\_\_\_ Procurement

\_\_\_\_ Other

## Vendors (include cost where applicable)

\_\_\_\_ STN

\_\_\_\_ Questel/Orbit

\_\_\_\_ Lexis/Nexis

☒ WWW/Internet

\_\_\_\_ In-house sequence systems (list)

☒ Dialog

\_\_\_\_ Dr. Link

\_\_\_\_ Westlaw

\_\_\_\_ Other (specify)

Application could be in a phased array antenna system, or electronic cooling. The flat plate is made of AlSiC or stainless steel.

GPI S  
HPI Q HPI S  
HPS K GPK

[Advanced Search](#)[Preferences](#)[Language Tools](#)[Search Tips](#)[Web](#) - [Images](#) - [Groups](#) - [Directory](#) - [News-New!](#)Searched the web for "**phased array antenna**" turbulence. Results **1 - 10** of about **192**. Search took **0.18** second[Get great deals Software and Peripherals at Dell!](#)[www.dell4me.com](#) Software and Peripherals at Dell! Printers, Monitors, Digi-Cams, more!

Sponsored Link

[Antenna Array on eBay - Buy or Sell Here!](#)[www.eBay.com](#) eBay - The World's Online Marketplace

Sponsored Link

### [REMTECH Inc. SODAR Technical Description Page 1](#)

... The advantages of steered beam **phased array antenna** are numerous: ... This is particularly useful for **turbulence** studies since it allows quicker detection for full ...[www.remtechinc.com/tech1.htm](#) - 8k - [Cached](#) - [Similar pages](#)

### [WebMET - The Meteorological Resource Center](#)

... To set up a **phased-array antenna**, one needs to measure the pointing ... and is a function of frequency, power output, atmospheric stability, **turbulence**, and, most ...[www.webmet.com/met\\_monitoring/913.html](#) - 22k - [Cached](#) - [Similar pages](#)

### [Atmospheric Research SODAR Page](#)

... The range of the **turbulence** is determined from the delay between the transmission of the acoustic pulse, and the reception of the ... **Phased Array Antenna** Option. ...[www.a-research.com.au/sodar.html](#) - 12k - [Cached](#) - [Similar pages](#)

### [\[PDF\]Microsystems for Space Applications](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)... Applications 2000 10 The University of New Mexico What is **Phased Array Antenna**? ... and high speed optical communication subsystem I Atmospheric **turbulence** and its ...[www.eece.unm.edu/adjunct/mkhod/presentation.pdf](#) - [Similar pages](#)

### [Met Office: CWINDE - Wind profilers.](#)

... development and testing of methods for a derivation of **turbulence** parameters in ... The figure shows the **phased-array antenna** surrounded by an about 2m high frame ...[www.metoffice.com/research/interproj/cwinde/profiler/lindenberg/](#) - 22k - [Cached](#) - [Similar pages](#)

### [Aircraft Weather Radar by Eastern Avionics Intl., Inc.](#)

... by measuring the electrical activity associated with convective wind sheer and **turbulence**. ... Both include a 12 or 10 inch flat plate **phased array antenna**. ...[www.avionix.com/radar.html](#) - 22k - [Cached](#) - [Similar pages](#)

### [Storming Media](#)

... Optoelectronic Device and System Development for Imaging Through **Turbulence**. ... Polymer-Based Photonic **Phased-Array Antenna** System Based on Detector- Switched ...[65.105.56.185/master18/category72-15.html](#) - 17k - [Cached](#) - [Similar pages](#)

### [L. Pastur - english CV](#)

... Weak wave **turbulence** in the Faraday experiment. ... CSF as Contingent Scientist: Implementation of a new "all-optical" architecture for a **phased-array antenna**. ...[www.ino.it/~pastur/cven.html](#) - 14k - [Cached](#) - [Similar pages](#)

**[PDF] Radar Earth Observation**File Format: PDF/Adobe Acrobat - [View as HTML](#)

... 16 April 2002 Instruments 31 PHARS - a SAR testbed \* C-band Synthetic Aperture Radar

\* active **phased array antenna** (1 dimensional) \* 8 T/R modules deliver 160 ...[irctr.et.tudelft.nl/sector/rs/courses/REO\\_part2\\_2002.pdf](http://irctr.et.tudelft.nl/sector/rs/courses/REO_part2_2002.pdf) - [Similar pages](#)**[PDF] CPost/4.28**File Format: PDF/Adobe Acrobat - [View as HTML](#)... at 53.5 MHz with a computer-controlled steerable **phased-array antenna** consistingof 196 ... Neutral **turbulence** in a stratified atmosphere is now being numerically ...[jro.igp.gob.pe/publications/other/cedar\\_sousy.pdf](http://jro.igp.gob.pe/publications/other/cedar_sousy.pdf) - [Similar pages](#)

Goooooooooooooogle ►

Result Page: 1 2 3 4 5 6 7 8 9 10 [Next](#)

Google Search

[Search within results](#)Dissatisfied with your search results? [Help us improve.](#)Get the [Google Toolbar](#):[Google Home](#) - [Advertise with Us](#) - [Search Solutions](#) - [Services & Tools](#) - [Jobs, Press, & Help](#)

©2002 Google


[Advanced Search](#)
[Preferences](#)
[Language Tools](#)
[Search Tips](#)



[Web](#) - [Images](#) - [Groups](#) - [Directory](#) - [News-New!](#)

Searched the web for "**phased array antenna**" isothermal. Results **11 - 20** of about **25**. Search took **0.20** second

[Click Directly to 26 U.S. Industrial \*\*Array Antenna\*\* Manufacturers.](#)

[www.ThomasRegister.com](#) #1 Industrial Online Database. No Registration!

Sponsored Link

[Antenna Array on eBay - Buy or Sell Here!](#)

[www.eBay.com](#) eBay - The World's Online Marketplace

Sponsored Link

[JKU-FoDok: Indexseite](#)

... Boundary Element. element simulations JKU-FoDok: PUBLIKATION: A **Phased**

**Array Antenna** for Simultaneous Thermotherapy. Elementare Topologie ...

[fodok.uni-linz.ac.at/INDEX/GERMAN/uni-linz\\_E.htm](#) - 101k - [Cached](#) - [Similar pages](#)

[Dpt. of Defense STTR Awards 1996](#)

... closed loop control of laser beams for anoptical **phased array antenna** to be ... Self-heating effects will be included by performing non **isothermal** simulations in ...

[www.nttc.edu/resources/funding/awards/dod/dodsttr196.asp](#) - 101k - [Cached](#) - [Similar pages](#)

[Dpt. of Defense SBIR Awards 1995.1](#)

... CA 90501 Title: A MMW Source for a New **Phased-Array Antenna** Architecture Topic ... High-Bandgap

Nitrid= es Topic #: AF 95-179 Firm: **ISOTHERMAL SYSTEMS RESEARCH, INC** ...

[www.nttc.edu/resources/funding/awards/dod/dod951sel.asp](#) - 101k - [Cached](#) - [Similar pages](#)

[www.seds.org/pub/software/text/france.txt](#)

... The rapid-scanning, **phased-array antenna** will be fitted with several hundred transmitting ... The facility has three independent **isothermal** zones heated by sodium ...

48k - [Cached](#) - [Similar pages](#)

[Smart Structures and Materials 1994: Smart Materials](#)

... increases the final transformation stress relative to **isothermal** transformation. ... These composites would be used in **phased array antenna** systems, therefore, the ...

[www.spie.org/web/abstracts/2100/2189.html](#) - 65k - [Cached](#) - [Similar pages](#)

[ [More results from www.spie.org](#) ]

[\[PDF\]HUT RADIO LABORATORY RESEARCH AND EDUCATION 1999](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

... power standards. A power standard of **isothermal** type was recognised as the best alternative for future development. SSIA institute ...

[www.hut.fi/Units/Radio/annual/report99.pdf](#) - [Similar pages](#)

[\[PDF\]Subject Categories of the Division D. Engineering](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

Page 1. Subject Categories of the Division D. Engineering Select a category to view the collection of records cited. NA means no abstracts in that category. ...

[www.sti.nasa.gov/Pubs/star/9718/divd.pdf](#) - [Similar pages](#)

[\[PDF\]Preliminary AMTA 2001 Technical Program](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

... AMTA 2001 Program Subject to Change Depending on Actual Paper Submissions Tuesday, October 23, 2001 Session 8 - **Phased Array Antenna** Measurement Topics 15:45 ...

[www.amta.org/AMTA2001/Schedule/2001\\_Preliminary\\_Schedule\\_and\\_Abstracts.pdf](http://www.amta.org/AMTA2001/Schedule/2001_Preliminary_Schedule_and_Abstracts.pdf) - [Similar pages](#)

[PDF] **Ferroelectricity Newsletter**

File Format: PDF/Adobe Acrobat - [View as HTML](#)

Page 1. Ferroelectricity Newsletter A quarterly update on what's happening in the field of ferroelectricity Volume 6, Number 4 Fall ...

[www.sp.nps.navy.mil/projects/ferro/vol6no4.pdf](http://www.sp.nps.navy.mil/projects/ferro/vol6no4.pdf) - [Similar pages](#)

[PDF] **INTERNATIONAL RELIABILITY PHYSICS SYMPOSIUM**

File Format: PDF/Adobe Acrobat - [View as HTML](#)

Page 1. page 1 1 1/7/99 11:40 pm EST 1999 INTERNATIONAL RELIABILITY PHYSICS SYMPOSIUM <http://www.irps.org/> March 22-25, 1999 TOWN ...

[www.irps.org/99-37th/ap99p707.pdf](http://www.irps.org/99-37th/ap99p707.pdf) - [Similar pages](#)



Result Page: [Previous](#) [1](#) [2](#) [3](#) [Next](#)

"phased array antenna" isothermal

Google Search

[Search within results](#)

[Google Home](#) - [Advertise with Us](#) - [Search Solutions](#) - [Services & Tools](#) - [Jobs, Press, & Help](#)

©2002 Google